

**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03



**TENDER DOCUMENT  
FOR WORKS CONTRACT  
TENDER ENQUIRY NO : **TRM/TW/22/03****

**FOR**

**MANUFACTURING ACTIVITIES OF SPECIAL TRANSFORMERS USING IN-  
HOUSE FACILITIES AT  
BHEL JHANSI**

**Contact Person :**

Name : Ms Deepali Sharma  
Designation : Dy. Manager (CCC-MM)  
Email : deepali@bhel.in  
PH : 0510 – 2770001-2419

Or

Name : P B S Ekka  
Designation : AGM (CMM)  
Email : pbsekka@bhel.in  
PH : 0510 – 241 – 2549

**Tender Due Date : 13.12.2022 at 13 :15 Hrs**  
**Tender Opening Date : 13.12.2022 at 14 :00 Hrs**

**SPECIAL TRANSFORMER MANUFACTURING DEPARTMENT  
BHEL, PO : BHEL, Jhansi 284120 (UP)**

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

**Special Transformer (SPT) Manufacturing Department  
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**Details of bidder and Documents To Be Submitted Along With Technical Bid**

Please number your documents in continuation with tender documents at bottom (footer) of page.

SL	Particular	Detail	
1.	Name of the Firm		
2.	Name of the Proprietor/Partners		
3.	Address		
4.	Mobile No:		
5.	E-mail ID:		
<b>Essential Documents</b>			
	Particular	Detail	Page No
6.	Acceptance of Terms & conditions Signature on all pages without conditions of contractor	Submitted/ Not submitted	
7.	Blank price bid format duly signed by the contractor.	Submitted/ Not submitted	
8.	Copy of PF registration	PF No:	
9.	Copy of ESI Registration	ESI No:	
10.	Copy of PAN Card	PAN No:	
11.	Copy of GST Registration	GST No:	
12.	Self declaration as per as per annexure- 'V' on firm's letter head	Submitted/ Not submitted	
13.	Copy of ownership of firm (Refer page 21 point 8)	Submitted/ Not submitted	
14.	Reciept of tender fees deposition	Amt-	
15.	Reciept of EMD deposition	Amt-	
15.	Copy of turn over for last three year  i. <b>2019-20</b> ii. <b>2020-21</b> iii. <b>2021-22</b>	Submitted/ Not submitted	

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<b>16.</b>	Work Experience :  i. Work Order ii. Completion Certificate iii. Relevant TDS/TRACES (in case of Experience in private sector)	Submitted/ Not submitted	
<b>Desirable Documents</b>			
<b>17.</b>	Copy of Income Tax Return  i. FY: 2019-20 ii. FY: 2020-21 iii. FY: 2021-22	Submitted/ Not submitted	

We will fulfill all the obligations of the contractor and abide by the Terms & Conditions mentioned in the Tender Enquiry.

Date :

Signature with Name & Seal

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**PART-II: PRICE BID**

**(Separate Envelope)**

<b>SL</b>	<b>Section</b>	<b>Page Nos.</b>
1	PRICE BID (JS-472)	-

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**NOTICE INVITING TENDER**



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SL	Particulars	Details
1.	Name of Works	<b>Manufacturing activities of Special Transformers using In-House facilities at BHEL Jhansi</b>
2.	Tender Evaluation Criteria	As per Qualifying Requirements (As per Tender Documents & GTC)
3.	Duration of the Contract	<b>12 Months</b> from the date of award of Works Contract / Order
4.	Last Date of Receipt of the Tender	(as on page # 1)
5.	Date of opening Tender	(as on page # 1)
6.	Address for submitting the tender	(as on page # 7)
7.	Earnest Money Deposit (EMD)	Rs 3.0 Lakhs/- only (Waived for MSE Vendor)
8.	Cost of Tender	NIL
9.	Reverse Auction	<b>BHEL Shall be resorting to reverse auction (RA) (Guidelines as available on <a href="http://www.bhel.com">www.bhel.com</a>) for this tender. RA shall be conducted among the techno-commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in the reverse auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking</b>
10.	Validity of Offer	120 Days

**Note:** The EMD may be accepted only in the following forms:

- i) **Electronic Fund Transfer credited in BHEL Account (before tender opening)**  
BHEL account details: Bank Name: SBI, A/C No: 10670828866, IFSC Code: SBIN0003807, A/C Holder Name: BHARAT HEAVY ELECTRICALS LIMITED
- ii) **At BHEL, cash office through POS machine No Demand Drafts shall be accepted. The contractors may physically visit the work place before quoting their rates. For relevant details, please visit our website [www.bhel.com](http://www.bhel.com) & [www.bheljhs.co.in](http://www.bheljhs.co.in).**

**Note: BHEL takes no responsibility for any delay / loss of documents or correspondence sent by courier or post. Late tenders shall be rejected outright.**

The techno-commercial bid comprising (i) all its sections, (ii) all enclosures in support of various clauses and requirements and (iii) EMD, shall be duly signed and sent in a sealed envelope boldly super-scribing **“PART-I TECHNO COMMERCIAL BID FOR ‘Manufacturing activities of Special Transformers using In-house facilities at BHEL Jhansi’**. Similarly, the Price-bid must be duly signed and sent in a sealed envelope

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boldly super-scribing "PART-II PRICE BID FOR 'Manufacturing activities of Special Transformers using In-house facilities at BHEL Jhansi'. Both these envelopes shall be placed inside 3<sup>rd</sup> sealed envelope super-scribing 'Manufacturing activities of Special Transformers using In-house facilities at BHEL Jhansi'.

**The tender shall be addressed to as follows:**

If submitted personally

Tender Box  
Security Control Room/Office  
Administrative Building  
Bharat Heavy Electricals Limited  
Jhansi-284120 (U P)

Or if sent through Courier / Post

Office of  
Name : P B S Ekka  
Designation : AGM (CMM)  
Email : pbsekka@bhel.in  
PH : 0510-2770001-2549

**Part-I (Techno Commercial) Bid:**

Part I of the sealed tenders alone will be opened by BHEL in the presence of tenderers who are present at the time & place of opening. A signed blank price-bid copy should be enclosed with this bid. The spaces for prices should be crossed (x).

**Part-II (Price) Bid:**

The price bid should contain prices only. Price bid will be opened only for the parties who qualify in techno commercial bid.

**TO BE SIGNED BY THE TENDERER**

Certified that all sections of the Tender have been read / complied & agreed to, and each page of the tender offer has been signed & stamped.

(Signature of Authorized person(s))

**Name and designation of Authorized Person(s)**

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**WORK SPECIFICATION**  
**Brief Description of Works**

SL	Description of Work	Section
(A)	(B)	(C)
1	Manufacturing activities of 3-phase freight Transformers (6531 KVA / 7775 KVA)	Bay-3 & Bay-6
2	Manufacturing activities of IGBT MEMU Transformers	Bay-3 & Bay-6
3	Manufacturing activities of freight 5400 KVA Transformers	Bay-3 & Bay-6
4	Manufacturing activities of ESP Transformers	Bay-3, Aux. feeder shop, Bay-8 Assembly & winding
5	Manufacturing activities of Dry Type Transformers	Bay-3 & Bay-7
6	Manufacturing activities of Instrument (CT/VT) transformers	Aux. feeder shop, Bay-8 Assembly & winding
7	Manufacturing of Bushing/Turret CT & static ring of Power trfr	Bay-8 winding
8	Manufacturing of dovetail strips & angle ring of Power trfr	Aux. feeder shop

- The details of activity involved in the above said works are given in Annexure-G. The total work will be limited to 207068 technology hrs. The total work quantity shall vary by +/- 30% within the currency of the contract.
- The contractor will have to appoint sufficient no. of supervisors to organize and supervise the work being done by his employees in 1st, 2nd & 3rd shifts (if needed). Supervisors allocated for all the sections, against this contract need to be present full day and supervise the activities.
- The above work should meet the requirement of the shop/CQX executive/supervisor. The above work shall be normally done in 1st & 2nd shift. Work shall also be done in 3rd shift and on Sunday/Holidays and as & when required.
- Contractor have to collect all required material, drawings and manufacturing information from shop SPC/contracting department. Required space, tools & tackles and facilities like material handling equipments, fixture and crane will be provided by BHEL subject to its availability in normal working conditions. Consumables like resin glass tape, araldite, varnish, paint, cotton waste, feviquik etc. will be issued by BHEL, and these will be collected by contractor. Contractor will check for any defect in material and get it rectified/ replaced before starting work.

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- All the material, electricity, compressed air, consumable and tools available with BHEL shall be provided by BHEL free of cost.
- EOT crane shall be provided by BHEL free of cost along with crane operator and slinger. However, in contingency in order to meet the job requirement, any additional resources (like crane operator, slinger etc.) if required shall be arranged by the contractor at their cost.
- All the job after manufacturing will be inspected by CQX/contracting department/customer and if any default/defect occurs, the same has to be rectified by contractor at free of cost.
- The contractor shall maintain proper records of all the activities/inspection stages and the same should be made available, as and when required by BHEL.
- Measurement Book (MB) to be prepared work order wise and job serial no./set no. wise by the contractor. Contractor should also get the MB verified by shop & CQX representative.
- The house keeping of the work area and maintaining work discipline shall be the contractor's responsibility.
- Contractor is advised to visit the work place to know the work content before submission of quotation. The required documents/ drawing/MI Sheet can be seen at our works.

**Note: The above work should meet the technical requirement of the BHEL and customer. Work should be carried out as per drawings, specification, standards, procedures, laid down by BHEL, which may get revised as per requirement from time to time. Party will be liable to follow drawings, standards, procedures that are in use at that time without any change in rates and terms and conditions of contract.**

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**ANNEXURE-G**

**SCOPE OF WORKS**

<b>SL</b>	<b>Works Nature</b>	<b>Details of Activities Involved</b>	<b>Area Section</b>
1.	<p><b>6531 KVA / 7775 KVA 3-Phase Freight Transformers:</b></p> <p><b>Core Assembly of LOT, Core coil assembly, E/F mounting Terminal Gear assembly, servicing and tanking of LOT, SOD and GOD.</b></p> <p><b>Core Assembly, Coil winding, Core Coil Assembly And TG of SOD.</b></p> <p><b>Core Assembly, Coil winding Core Coil Assembly And TG of GOD.</b></p>	<ol style="list-style-type: none"> <li>1. Laying of Endframe, Core Assembly, resin glass taping of LOT, SOD &amp; GOD as per drawing.</li> <li>2. Welding of SOD core as per drawing.</li> <li>3. Unlacing of core, lowering of coil into core, clamping and tightening of coil and relacing of core.</li> <li>4. Enamel burning and cleaning, Terminal gear assembly, Brazing taping, and compartment fitting.</li> <li>5. Servicing of transformer: Re-tightening of all hardwares using torque wrench, varnishing, and quality inspection as per their checklist.</li> <li>6. Tanking of LOT, SOD &amp; GOD in tank and final cover mtg after vacuum processing.</li> <li>7. Preparation of job for Electrical testing.</li> <li>8. Cleaning of tank if dirty.</li> <li>9. Collection of material from store/CRX.</li> <li>10. BHEL Shop/quality/Customer shall inspect the job at any point of time and their bookings to be attended.</li> <li>11. Oil pressure testing &amp; final Painting pinking of transformers for dispatch as PER CQX checklist.</li> <li>12. Operation of drill machine, if required.</li> <li>13. Store Keeping for raw materials &amp; hardwares.</li> </ol>	Bay 3 & 6
2.	<p><b>Core Assembly, Varnishing of coils, coil Assembly ,Core coil assembly, E/F mounting ,TG, Tanking, Tank preparation and wiring of IGBT ACEMU trfr</b></p>	<ol style="list-style-type: none"> <li>1. Laying of End Frame, Core Assembly, E/F tightening and 2 KV test.</li> <li>2. Varnishing of coil as per BHEL Jhansi Specifications.</li> <li>3. Leg assembly of coils ( 2 legs /set)</li> <li>4. Unlacing of core, lowering of coil into core, clamping and tightening of coil and relacing of core.</li> <li>5. Terminal gear assembly, brazing, taping.</li> <li>6. Equipments mounting on tank, wiring, tanking &amp; cover mounting.</li> <li>7. Preparation of job for Electrical testing.</li> </ol>	Bay 3 & 6

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		<ol style="list-style-type: none"> <li>8. Oil pressure testing &amp; final Painting, pinking of transformers for dispatch as PER CQX checklist.</li> <li>9. Collection of material from shop store/CRX.</li> <li>10. Preparation of job for Electrical testing.</li> <li>11. Operation of varnish plant.</li> <li>12. Operation of drill machine, if required.</li> </ol>	
3.	<b>5400 KVA trfr for WAG-7 locomotives.</b>	<ol style="list-style-type: none"> <li>1. Laying of End Frame, Core Assembly, E/F tightening and 2 KV test.</li> <li>2. Coil stacking of leg I, II, III.</li> <li>3. Unlacing of core, lowering of coil into core, clamping and tightening of coil and relacing of core.</li> <li>4. Terminal gear assembly, brazing &amp; taping.</li> <li>5. Tanking of trfr in tank and final cover mtg after vacuum processing.</li> <li>6. Preparation of job for Electrical testing.</li> <li>7. Oil pressure testing &amp; final pinking of transformers for dispatch</li> <li>8. Cleaning of tank if dirty.</li> <li>9. Collection of material from store/CRX.</li> <li>10. BHEL Shop/quality/Customer shall inspect the job at any point of time and their bookings to be attended.</li> <li>11. Store Keeping for raw materials &amp; hardwares.</li> </ol>	Bay 3 & 6
4.	<b>Bay 8 - ESP transformer assembly</b>	<ol style="list-style-type: none"> <li>1. Laying of End Frame, Core Assembly, E/F tightening and 2 KV test of ESP &amp; ACR.</li> <li>2. Unlacing of core, lowering of coils (HV &amp; LV) into core, clamping and tightening of coils and re-lacing of core after pre-heating.</li> <li>3. Brazing, cleaning, taping &amp; lug crimping of LV leads. Crimping, soldering &amp; taping of HV leads.</li> <li>4. Terminal gear (TG) assembly followed by vacuum processing &amp; tank preparation.</li> <li>5. Servicing of TG assembly: Re-tightening of all hardwares using torque wrench &amp; varnishing.</li> <li>6. ACR assembly: Unlacing of core, lowering of coils into core, clamping and tightening of coils and re-lacing of core after pre-heating. Brazing, cleaning &amp; taping of leads followed by TG assembly.</li> </ol>	Bay 3 & 8

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		<ol style="list-style-type: none"> <li>7. Tanking of TG &amp; ACR assembly in tank and final cover mounting after vacuum processing.</li> <li>8. Assembly of M Box.</li> <li>9. Preparation (case fitting) of job for electrical testing.</li> <li>10. Cleaning of tank (if dirty).</li> <li>11. Shop/quality/customer shall inspect the job at any point of time and their bookings to be attended.</li> <li>12. Oil pressure testing (IH/CI) &amp; final painting &amp; pinking of transformers for dispatch as per QC checklist.</li> <li>13. Collection of material from store/CRX.</li> <li>14. Store keeping for raw materials &amp; hardwares.</li> </ol>	
<b>5.</b>	<b>Dry Type Transformers</b>	<ol style="list-style-type: none"> <li>1. Laying of End Frame, Core Assembly, E/F tightening and 2 KV test.</li> <li>2. Unlacing of core, lowering of coil into core, clamping and tightening of coil and relacing of core.</li> <li>3. Terminal gear assembly, brazing, taping.</li> <li>4. Enclosure assembly &amp; wiring, E/F wiring, roller assembly.</li> <li>5. Preparation of job for Electrical testing.</li> <li>6. Store Keeping for raw materials &amp; hardware.</li> <li>7. Collection of material from shop store/CRX</li> </ol>	Bay 3 & 7

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6.	<b>Bay 8 - Instrument transformer assembly</b>	<ol style="list-style-type: none"> <li>1. Tank preparation.</li> <li>2. Lowering of primary &amp; secondary coil in tank. Taping &amp; tightening/clamping of coils.</li> <li>3. Secondary coil connection preparation &amp; fitting of the same in secondary terminal board followed by pre heating of job.</li> <li>4. Mounting of tank cover followed by lowering of insulator &amp; tightening.</li> <li>5. Top chamber preparation &amp; its mounting. Primary coil connection preparation followed by vacuum processing &amp; final electrical testing.</li> <li>6. Shop/quality/customer shall inspect the job at any point of time and their bookings to be attended.</li> <li>7. Oil pressure testing (IH/CI), final painting &amp; pinking of transformer (including nitrogen filling) before dispatch as per QC checklist.</li> <li>8. Collection of material from store/CRX.</li> <li>9. Store keeping for raw materials &amp; hardwares.</li> </ol>	Bay 8
7.	<b>Feeder shop – Tube tapping (Instrument transformer - CT)</b>	<ol style="list-style-type: none"> <li>1. Collection of material (Copper/Aluminium pipes) from store/CRX.</li> <li>2. Bending of tube as per approved drawing.</li> <li>3. Thorough cleaning of tube through cotton tape, emery paper &amp; thinner.</li> <li>4. Marking &amp; tapping of tube (multi-layer insulation) as per approved drawing in dust free environment.</li> <li>5. Insulation through copper foil &amp; soldering on top layer of tube.</li> <li>6. Soldering of earth lead followed by single layer insulation of crepe paper &amp; cotton tape.</li> <li>7. Store keeping for raw materials.</li> </ol>	Aux. feeder shop
8.	<b>Feeder shop – LV coil (ESP transformer)</b>	<ol style="list-style-type: none"> <li>1. Fixing of mould on winding machine followed by pressboard wrapping over the mould.</li> <li>2. Fixing of spacer, bottom blocks &amp; edge blocks through adhesives.</li> <li>3. LV lead preparation (bottom side) followed by its locking with edge blocks.</li> <li>4. Winding to done as per approved drawing.</li> <li>5. LV lead preparation (top side) followed by cotton taping from top to bottom.</li> </ol>	Aux. feeder shop

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		<ol style="list-style-type: none"> <li>6. Insulation of coil by usage of spacer, AWW paper &amp; aluminum kraft paper.</li> <li>7. Soldering of earth strip.</li> <li>8. Final layer of insulation of press paper, spacer, pressboard &amp; polyester tape.</li> <li>9. Collection of material from store/CRX.</li> <li>10. Store keeping for raw materials.</li> </ol>	
<b>9.</b>	<b>Feeder shop – ACR coil (ESP transformer)</b>	<ol style="list-style-type: none"> <li>1. Fixing of mould on winding machine followed by pressboard wrapping over the mould.</li> <li>2. LV lead preparation followed by its locking with edge blocks.</li> <li>3. Winding to done as per approved drawing.</li> <li>4. LV lead preparation (opposite side) followed by cotton taping from top to bottom.</li> <li>5. Collection of material from store/CRX</li> <li>6. Store keeping for raw materials.</li> </ol>	Aux. feeder shop
<b>10.</b>	<b>Feeder shop – Static ring (ESP transformer)</b>	<ol style="list-style-type: none"> <li>1. Lead marking on former of static ring.</li> <li>2. Insulation of copper foil followed by soldering of copper strip &amp; leads on layer of copper foil.</li> <li>3. Multi-layer insulation of crepe paper followed by single layer insulation of cotton tape.</li> <li>4. Collection of material from store/CRX.</li> <li>5. Store keeping for raw materials.</li> </ol>	Aux. feeder shop
<b>11.</b>	<b>Feeder shop – Cable (ESP transformer)</b>	<ol style="list-style-type: none"> <li>1. Collection of material from store/CRX.</li> <li>2. Store keeping for raw materials.</li> <li>3. Cutting of cable from drum followed by cleaning of cables.</li> <li>4. Marking of cables &amp; part removal of rubber portion.</li> <li>5. Cutting of iron wire (present inside the cable) followed by fixing &amp; tightening of glands.</li> <li>6. Cutting &amp; marking of red, yellow, green &amp; black wires (present inside the cable) as per requirement.</li> <li>7. Insertion of ferrule followed by lug crimping.</li> <li>8. Steps from Sl. no. 4 to 7 to be repeated on opposite side of the cable.</li> </ol>	Aux. feeder shop

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12.	<b>Feeder shop – Dovetail blocks (Power transformer)</b>	<ol style="list-style-type: none"> <li>1. Collection of material from store/CRX.</li> <li>2. Store keeping for raw materials.</li> <li>3. Thorough cleaning &amp; oiling of power press machine.</li> <li>4. Dye &amp; plate fitting followed by block setting.</li> <li>5. Cutting of blocks as per approved drawing.</li> <li>6. Arranging &amp; bundling of blocks through adhesives in line with approved drawing &amp; requirement.</li> </ol>	Aux. feeder shop
13.	<b>Feeder shop – Angle ring (Power transformer)</b>	<ol style="list-style-type: none"> <li>1. Manufacturing of mould as per drawing.</li> <li>2. Insulation of press paper followed by marking &amp; cutting.</li> <li>3. Insertion of top, middle &amp; bottom washer through adhesives.</li> <li>4. Drilling of hole on washers.</li> <li>5. Tightening of ring by cotton tape.</li> <li>6. Cutting of off cut paper followed by final finishing &amp; identification work.</li> <li>7. Collection of material from store/CRX.</li> <li>8. Store keeping for raw materials.</li> </ol>	Aux. feeder shop
14.	<b>Bay 8 winding – Ring core CT (Power &amp; Instrument transformer)</b>	<ol style="list-style-type: none"> <li>1. Lifting of bare core from Bay 5 &amp; unloading in Bay 8.</li> <li>2. Fixing of bare core on winding machine. Cutting of washer &amp; wrapping of the same on bare core thrice.</li> <li>3. Winding of core as per approved ES/drawing &amp; offering the ring core CT to testing department.</li> <li>4. After satisfactory testing results, leads to be prepared &amp; soldering of the same to be done on tested ring core CT.</li> <li>5. Insulation through cotton tape followed by insertion of ferrules &amp; identification/marketing of ring core CT.</li> <li>6. For bare core of size (greater than 550mm dia &amp; lesser than 150mm dia), hand winding to be done.</li> <li>7. Collection of material from store/CRX.</li> <li>8. Store keeping for raw materials</li> </ol>	Bay 8
15.	<b>Bay 8 winding – Flaring (Instrument transformer – 24/36kV CT)</b>	<ol style="list-style-type: none"> <li>1. Lifting of bare core from Bay 5 &amp; unloading in Bay 8.</li> <li>2. Fixing of bare core on winding machine. Cutting of washer &amp; wrapping of the same on bare core thrice.</li> </ol>	Bay 8

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		<ol style="list-style-type: none"> <li>3. Winding of core as per approved ES/drawing &amp; offering the ring core CT to testing department</li> <li>4. After satisfactory testing results, leads to be prepared &amp; soldering of the same to be done on tested ring core CT.</li> <li>5. Preparation of insulation material followed by flaring (multi-layer insulation by crepe paper, aluminium foil &amp; copper strip through adhesives) in line with approved drawing/requirement.</li> <li>6. Collection of material from store/CRX.</li> <li>7. Store keeping for raw materials.</li> </ol>	
16.	<b>Bay 8 winding – Flaring (Instrument transformer – 132kV &amp; 220kV VT)</b>	<ol style="list-style-type: none"> <li>1. Fixing of coil on flaring machine.</li> <li>2. Lead &amp; neck preparation.</li> <li>3. Preparation of insulation material followed by flaring (multi-layer insulation by crepe paper through adhesives) in line with approved drawing/requirement.</li> <li>4. Collection of material from store/CRX.</li> <li>5. Store keeping for raw materials.</li> </ol>	Bay 8
17.	<b>Bay 8 winding – SSD Card &amp; resistor board (ESP transformer)</b>	<p><b>SSD Card:</b></p> <ol style="list-style-type: none"> <li>1. Engraving &amp; marking on SSD card base.</li> <li>2. Lead preparation (12 nos.)</li> <li>3. Mounting of glow tube, resistance &amp; relay base on SSD card base.</li> <li>4. Collection of material from store/CRX.</li> <li>5. Store keeping for raw materials</li> </ol> <p><b>Resistor Board:</b></p> <ol style="list-style-type: none"> <li>1. Engraving &amp; marking on resistor board base.</li> <li>2. Lead preparation (6 nos.)</li> <li>3. Dismantling of resistor board for fixing of leads followed by re-assembly.</li> <li>4. Collection of material from store/CRX.</li> <li>5. Store keeping for raw materials</li> </ol>	Bay 8

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority



**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

18.	<b>Bay 8 winding – Static ring (Power transformer)</b>	<ol style="list-style-type: none"> <li>1. Lead marking on former of static ring.</li> <li>2. Insulation through copper foil followed by soldering of copper strip &amp; lead on layer of copper foil.</li> <li>3. Multi-layer insulation of crepe paper followed by single layer insulation of cotton tape.</li> <li>4. Collection of material from store/CRX.</li> <li>5. Store keeping for raw materials.</li> </ol>	Bay 8
19.	<b>Operation of vacuum vessel, oil filtration plant, varnish impregnation plant &amp; heating oven.</b>	<ol style="list-style-type: none"> <li>1. Loading and unloading of job to/from the vessel.</li> <li>2. Data capturing like temperature &amp; vacuum at regular intervals.</li> <li>3. Filling of oil into vacuum pumps.</li> <li>4. Emptying of oil tanker to storage tank.</li> <li>5. Oil filtration of raw oil as per requirements.</li> <li>6. Filling and emptying of oil into the transformers.</li> <li>7. Cleaning and general maintenance of vessels and oil filtration plants.</li> <li>8. All operations of varnish impregnation plant &amp; heating oven (Bay-6 only).</li> </ol>	Bay 6 & Bay 8
20.	<b>Operation of repair / rectification of Jobs / Trfr</b>	<ol style="list-style-type: none"> <li>1. Repair / rectification of Jobs / Trfr</li> </ol>	Bay 6, Bay 7 (DTT) & Bay 8

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**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

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**LD CLAUSE AND PAYMENT TERMS**

1. **Penalty Clause:** Any delay in execution as per measurement book attributable to contractor shall attract penalty @ 0.5% per week for delayed job and maximum up to the ceiling of 10% respective job value.
2. **Payment Terms:** The work shall be measured in terms of technology hours and payment shall be made activity wise based on applicable technology hours of the activity (Refer Annexure M)

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**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

**PRE-QUALIFYING REQUIREMENTS (PQR)**

SL	DESCRIPTION OF PRE-QUALIFYING REQUIREMENT
1.	<p><b>Average Annual financial turnover</b> during the last 3 years ending 31<sup>st</sup> March 2022, should be at least <b>Rs.21.79 Lakhs</b> approx. <i>(Please attach audited balance sheet along with Profit &amp; Loss account of last 3 financial years, ending 31<sup>st</sup> March 2022, or Certificate of CA as proof of financial T/o.</i></p> <p><i>If T/o details of 3 years are not available then available years T/o shall be evaluated by dividing it by 3.</i></p>
2.	<p><b>2.1: Work Experience:</b> (Bidder should fulfill any one of the following):</p> <p>Experience of having successfully completed <b>similar works*</b> (defined below) during last years ending the month previous to the month of issuing tender enquiry should be either of the following :-</p> <ul style="list-style-type: none"> <li>a. Three similar completed works each valuing not less than the amount equal to <b>Rs.29.05 Lakhs</b></li> <li><b>OR</b></li> <li>b. Two similar completed works each valuing not less than the amount equal to <b>Rs.36.32 Lakhs</b></li> <li><b>OR</b></li> <li>c. One similar completed works each valuing not less than the amount equal to <b>Rs.58.11 Lakhs.</b></li> </ul> <p><b>*Similar Work:</b> Any service or works contract of requisite value even if the contract has not been completed or closed in any PSU/CPSU/State govt. / Central Govt. / Private sector involving manufacturing/maintenance or assistance in manufacturing/maintenance activities of electrical equipment.</p> <p>Documentary proof (Completion Certificate and WO/PO/ LOI) for the experience performance report issued by Customer for successful execution of the contract of requisite value to be submitted. In case of experience in Private Sector, in addition to above, relevant TDS Certificate must be attached as evidence.</p>
3.	Contractor Should have an ESI Code number and PF number.
4.	Contractor Should have PAN number.
5.	Contractor Should have GST (PAN based).

We hereby accept the above (Sign & Seal of Bidder)

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6.	Bidders are required to submit a self-declaration on their letter head as per the Format enclosed in <b>Annexure V</b> of tender enquiry.
7.	Blank Price Bid as per annexure "JS 472".
8.	<p>The documents required for legal entities under whose name and style Contractor has participated in the tender are as follows:</p> <p>8.1) Partnership Firm: Partnership Deed registered at the office of Registrar of Firms.</p> <p>8.2) Company: Certified copy Memorandum of Association, Article of Association and Incorporation Certificate.</p> <p>8.3) Society: Registration certificate issued by Registrar of societies.</p> <p>8.4) Sole Proprietor-ship Firm: Undertaking on oath (On Rs. 100/- Stamp Paper ) that Proprietor is solely responsible for all rights and liabilities while working under the name and style of Sole Proprietorship firm namely ( _                      ).</p>

We hereby accept the above (Sign & Seal of Bidder)

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**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

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**MANNER OF SPLITTING OF WORK**

All the eligible bidders will be categorized from L1 to Lh bidder (Lh will be the bidder who quoted highest rate) on the basis of their quoted rates. In case of equal rates at the same level, toss/lottery shall be drawn among all the contractors having quoted equal rates for grading from lower to higher rates. This list shall be referred for award of work.

The contract shall be splitted maximum between two contractors as illustrated below:

<b>P</b>	<b>L1</b>	<b>L2</b>	<b>TOTAL</b>
1	100	-	100
2	60	40	100

Where P is the accepted number of qualified responses.

The distribution shall be done on the acceptance given by the bidder(s) to the L1 price counter offered to them. In case, none of the bidders accepts the counter offer (L2 to Lh), the entire work order will be awarded to lowest bidder.

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**BLANK PRICE BID-JS 146  
ANNEXURE-“X”**

<u>Price Bid</u>				
SL No.	ACTIVITY	UOM	Tentative hours /Job	RATE PER Hour
A	B	C	D	E
1	Manufacturing of 3 phase frt loco trfr (6531 KVA / 7775 KVA)	HR	536	<b>Quoted rate per hour</b>
2	Manufacturing of IGBT MEMU trfr (1276 KVA / 1578 KVA)	HR	332	
3	Manufacturing of 5400 KVA trfr- WAG-7	HR	441	
4	Manufacturing of ESP transformer	HR	122	
5	Manufacturing of DTT (0-1000KVA)	HR	164	
6	Manufacturing of DTT (1001-2500KVA)	HR	212	
7	Manufacturing of DTT (2501-10000KVA)	HR	313	
8	Manufacturing of DTT (ABOVE 10000 KVA)	HR	424	
9	Manufacturing of 24/36/66 KV CT	HR	84	
10	Manufacturing of 132 KV CT	HR	113	
11	Manufacturing of 220 KV CT	HR	149	
12	Manufacturing of 132 KV VT	HR	76	
13	Manufacturing of 220 KV VT	HR	112	
14	Manufacturing of Bushing/turret CT for PT	HR	36	
15	Manufacturing of Static ring for PT	HR	70	
16	Manufacturing of Dovetail strips for PT	HR	144	
17	Manufacturing of Angle ring for PT	HR	14	
18	Operation of process plant and oil filtration plant	HR	15033*	
19	Operation of repair/rectification of Jobs/Trfr	HR	1000*	

\* Total operation Hrs

Note:-

1. Bidders to quote rate per Hour (exclusive of GST / other Govt. taxes as applicable) in column E.
2. In case any work is done by BHEL personnel then recovery of the same shall be as per wage rate declared by BHEL Jhansi HR from time to time.
3. Payment shall be made as per annexure M within 30 days from the date of bill subject to submission of complete documents in all respect on handing over the respective job to CQX.
4. Splitting of Jobs among successful bidders shall be as per tender documents.

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

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5. Evaluation of the lowest one bidder shall be on lowest rate per hour basis (Column E).
6. Measurement Books shall be maintained Job sl.no wise, work order wise, Hours consumed duly certified as per annexure F.
7. Penalty Clause: Any delay in execution as per measurement book attributable to contractor shall attract penalty @0.5% per week for delayed job and maximum up to the ceiling of 10 % respective job value.

**Instructions to Bidders to fill the Price Bid**

1. Bidders have to download the excel sheet in .xls format and fill the value in column E only (on computer) before taking print out of the price bid.
2. All the other cells of excel sheet are locked and non-editable.
3. Bidders must not fill the price bid manually after taking print out, else the price bid shall be rejected.
4. After filling the price bid and taking print out, bidder has to sign (with seal) at the designated place on the price bid.
5. Price bid have to kept in separate sealed envelope with tender name and tender no. written on the top of it.

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

**GENERAL TERMS AND CONDITIONS OF ENQUIRY FOR WORKS  
CONTRACTS (JHS 2055C R02)**

**UPLOADED IN SEPERATE FILE - PAGE NO 01 TO 14  
(To be signed by contractor and submitted along with bid)**

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority



**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

**Annexures (I-XII)**

**Attached below**

**(To be signed by contractor and submitted along with bid)**

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

**ANNEXURE "IX"**

**PROFORMA OF BANK GUARANTEE (in lieu of SECURITY DEPOSIT)**

In consideration of Bharat Heavy Electricals Limited (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at \_\_\_\_\_1 through its Unit at.....(name of the Unit) having agreed to exempt ( Name of the Vendor / Contractor / Vendors) with its registered office at \_\_\_\_\_ 2 (hereinafter called the said "Contractor" which term includes vendors), from demand under the terms and conditions of the Contract reference No. \_\_\_\_\_ dated \_\_\_\_\_ 3 valued at Rs.....4 ( Rupees -----) 4 (hereinafter called the said Contract), of Security Deposit for the due fulfilment by the said Contractor of the terms and conditions contained in the said Contract, on production of a Bank Guarantee for Rs. \_\_\_\_\_ 5 (Rupees \_\_\_\_\_ only),

we \_\_\_\_ (indicate the name and address of the Bank) having its Head Office at \_\_\_\_\_ (address of the head Office) (hereinafter referred to as the Bank), , at the request of \_\_\_\_\_ [Contractor(s)], being the Guarantor under this Guarantee, do hereby irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer, , an amount not exceeding Rs. \_\_\_\_\_ without any demur, immediately on demand from the Employer and without any reservation, protest, and recourse and without the Employer needing to prove or demonstrate reasons for its such demand

Any such demand made on the bank, shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_.

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any Court or Tribunal or Arbitrator or any other authority, our liability under this present being absolute and unequivocal.

The payment so made by us under this guarantee shall be a valid discharge of our liability for payment hereunder and the Contractor(s) shall have no claim against us for making such payment.

We, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied & the Employer certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said contractor(s)

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

or acceptance of the final bill or discharge of this guarantee by the Employer, whichever is earlier. This guarantee shall initially remain in force upto and including \_\_\_\_\_6 and shall be extended from time to time for such period as may be desired by the Employer. Unless a demand or claim under this guarantee is made on us in writing on or before the \_\_\_\_\_7, we shall be discharged from all the liability under this guarantee thereafter.

We, \_\_\_\_ (indicate the name of the Bank) \_\_\_\_ further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Contract and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Contractor but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

We,..... BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing. Notwithstanding anything to the contrary contained hereinabove:

- a) The liability of the Bank under this Guarantee shall not exceed..... 5
- b) This Guarantee shall be valid up to .....6
- c) Unless the Bank is served a written claim or demand on or before \_\_\_\_\_7 all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.

**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

We, \_\_\_\_\_ Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

Date \_\_\_\_\_ Day of \_\_\_\_\_

for \_\_ (indicate the name of the Bank) \_\_

(Signature of Authorised signatory)

1. ADDRESS OF THE EMPLOYER. I.e Bharat Heavy Electricals Limited
2. ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER.
3. DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE
4. CONTRACT VALUE
5. BG AMOUNT IN FIGURES AND WORDS
6. VALIDITY DATE
7. DATE OF EXPIRY OF CLAIM PERIOD

Note:

- 1) Units are advised that expiry of claim period may be kept 3-6 months after validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.
- 2) The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Contractor/Supplier /Bank issuing the guarantee.
- 3) In line with the GCC, SCC or contractual terms, Unit may carry out minor modifications in the Standard BG Formats. If required, such modifications may be carried out after taking up appropriately with the Unit/Region's Law Deptt.
- 4) In Case of Bank Guarantees submitted by Foreign Vendors-
  - a) From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India) can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.
  - b) From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)
    - b.1 In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by any of the Consortium Banks only will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank's (BHEL's Consortium Bank) branch in India. It is

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# Special Transformer (SPT) Manufacturing Department BHEL Jhansi-284120

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advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.

b.2 In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at sl.no. b.1 will required to be followed.

b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time). The BG Format provided to them should clearly specify the same.

<b>List of Consortium Banks (As on 22.02.2017)</b>			
	<b>Nationalized Banks</b>		<b>Nationalized Banks</b>
<b>1.</b>	Allahabad bank	19	Vijaya Bank
<b>2.</b>	Andhra bank		<b>Public Sector Banks</b>
<b>3.</b>	Bank of Baroda	20	IDBI
<b>4.</b>	Canara Bank		<b>Foreign banks</b>
<b>5.</b>	Corporation bank	21	CITI Bank
<b>6.</b>	Central bank	22	Deutsche Bank AG
<b>7.</b>	Indian Bank	23	The Hongkong and Shanghai Banking
<b>8.</b>	Indian Oversea Bank	24	Standard Chartered Bank
<b>9.</b>	Oriental bank of Commerce	25	J P Morgan
<b>10.</b>	Punjab National Bank		
<b>11.</b>	Punjab & Sindh Bank		<b>Private banks</b>
<b>12.</b>	State Bank of India	26	Axis Bank

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<b>13.</b>	State Bank of Hyderabad	27	The Federal Bank Limited
<b>14.</b>	Syndicate Bank	28	HDFC
<b>15.</b>	State Bank of Travancore	29	Kotak Mahindra Bank
<b>16.</b>	UCO Bank	30	ICICI
<b>17.</b>	Union Bank of India	31	Indusind Bank
<b>18.</b>	United Bank of India	32	Yes Bank

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**Special Transformer (SPT) Manufacturing Department  
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Annexure M

Sl. No.	PAYMENT TERMS OF SPECIAL TRANSFORMERS	
<b>1</b>	<b>PAYMENT TERMS OF 3-PHASE FREIGHT TRFR (6531 KVA / 7775 KVA)</b>	
	<b>Activity/Milestones</b>	<b>Technology hr(s)</b>
1.1	Core Building & Assembly of LOT	101.6
1.2	Core to Coil Assy & E/F Mounting	46
1.3	Compartment Fitting	32
1.4	TG Assly	112
1.5	Servicing	12.8
1.6	Tanking & Cover Mounting	23.2
1.7	SOD Core-Coil Assy & TG	64.8
1.8	GOD Core-Coil Assy & TG	58
1.9	SOD & GOD Coil Winding	57.6
1.10	Oil Pressure, Pinking & Painting	28
1.11	<b>Total</b>	<b>536</b>
<b>2</b>	<b>PAYMENT TERMS OF IGBT MEMU TRFR (1276 KVA / 1578 KVA)</b>	
2.1	Core Building & Assembly	25.6
2.2	Core to Coil Assy & E/F Mounting	67.2
2.3	TG, Tank Preparation & Tanking	147.2
2.4	Final Tightening / Wiring	64
2.5	Oil Pressure, Pinking & Painting	28
2.6	<b>Total</b>	<b>332</b>
<b>3</b>	<b>PAYMENT TERMS OF 5400 KVA FREIGHT TRFR</b>	
3.1	Core Building & Assembly	58.56
3.2	Core to Coil Assy & E/F Mounting	163.24
3.3	TG, Tank Preparation & Tanking	174.4
3.4	Final Tightening / Wiring	4.8
3.5	Oil Pressure, Pinking & Painting	40
3.6	<b>Total</b>	<b>441</b>
<b>4</b>	<b>PAYMENT TERMS OF ESP TRFR</b>	
4.1	Core Assembly of ESP, ACR and E/F Tightening	8.8
4.2	LV/ACR Coil winding & ACR strips	26.8
4.3	Static ring, dovetail blocks & cables	12
4.4	ACR/SSD card assembly & engraving of R & D plate	6
4.5	Core coil assembly, TG Assembly & resistor board assembly	16
4.6	Tanking, Cover mounting, Conservator assembly, M.box Assy, Servicing & case fitting	16.8
4.7	Pinking & oil bed work	35.6
4.8	<b>Total</b>	<b>122</b>
<b>5</b>	<b>PAYMENT TERMS OF DTT (0-1000 KVA)</b>	
5.1	Core Assembly and Resin Glass Curing	44
5.2	Core -Coil Assembly, E/F wiring	56.8

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5.3	TG Assembly	16.8
5.4	Enclosure Assembly, Wiring & roller Assembly	46.4
5.5	<b>Total</b>	<b>164</b>
<b>6</b>	<b>PAYMENT TERMS OF DTT (1001-2500 KVA)</b>	
6.1	Core Assembly and Resin Glass Curing	70.9
6.2	Core -Coil Assembly, E/F wiring	62.9
6.3	TG Assembly	28.0
6.4	Enclosure Assembly, Wiring & roller Assembly	50.1
6.5	<b>Total</b>	<b>212</b>
<b>7</b>	<b>PAYMENT TERMS OF DTT (2501-10000 KVA)</b>	
7.1	Core Assembly and Resin Glass Curing	126
7.2	Core -Coil Assembly, E/F wiring	79
7.3	TG Assembly	46.6
7.4	Enclosure Assembly, Wiring & roller Assembly	61.4
7.5	<b>Total</b>	<b>313</b>
<b>8</b>	<b>PAYMENT TERMS OF DTT (10001 KVA &amp; Above)</b>	
8.1	Core Assembly and Resin Glass Curing	152.8
8.2	Core -Coil Assembly, E/F wiring	92
8.3	TG Assembly	101.6
8.4	Enclosure Assembly, Wiring & roller Assembly	77.6
8.5	<b>Total</b>	<b>424</b>
<b>9</b>	<b>PAYMENT TERMS OF 24/36/66 kV CURRENT TRFR (CT)</b>	
9.1	Ring Core CT winding & final work	28.8
9.2	Flaring	25.6
9.3	Assembly	9.6
9.4	Pinking & oil bed work	20
9.5	<b>Total</b>	<b>84</b>
<b>10</b>	<b>PAYMENT TERMS OF 132kV CURRENT TRFR (CT)</b>	
10.1	Ring Core CT winding & final work	19.2
10.2	Primary tube bending & taping	55.2
10.3	Assembly	14.6
10.4	Pinking & oil bed work	24
10.5	<b>Total</b>	<b>113</b>
<b>11</b>	<b>PAYMENT TERMS OF 220kV CURRENT TRFR (CT)</b>	
11.1	Ring Core CT winding & final work	25.6
11.2	Primary tube bending & taping	84.8
11.3	Assembly	13
11.4	Pinking & oil bed work	25.6
11.5	<b>Total</b>	<b>149</b>
<b>12</b>	<b>PAYMENT TERMS OF 132kV VOLTAGE TRFR (VT)</b>	
12.1	VT winding	21.6
12.2	Flaring	21.6
12.3	Assembly	9.2
12.4	Pinking & oil bed work	23.6

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority



**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

12.5	<b>Total</b>	<b>76</b>
13	<b>PAYMENT TERMS OF 220kV VOLTAGE TRFR (VT)</b>	
13.1	VT winding	40
13.2	Flaring	30.4
13.3	Assembly	16
13.4	Pinking & oil bed work	25.6
12.5	<b>Total</b>	<b>112</b>
	<b>PAYMENT TERMS OF POWER TRFR (PT) ITEMS</b>	
14	Bushing/Turret CT Preparation per set of Power Trfr	36
15	Static Ring Preparation per set of PowerTrfr	70
16	Dove tail Strips per set of Power Trfr	144
17	Angle Ring per set of Power Trfr	14
	<b>PAYMENT TERMS OF PROCESS PLANT AND OIL FILTRATION PLANT</b>	
18	Technical hrs basis	1
	<b>PAYMENT TERMS OF REPAIR/RECTIFICATION OF JOBS/TRFR</b>	
19	Technical hrs basis	1

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

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BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

**SOP For Implementation of Risk and Cost (TOTAL 10 PAGES)**

**UPLOADED IN SEPARATE FILE**

**(To be signed by contractor and submitted along with bid)**

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority

**Special Transformer (SPT) Manufacturing Department  
BHEL Jhansi-284120**

Works Contract Tender Enquiry No: TRM/TW/22/03

**Format JS 146 - Price Bid Sheet (in a separate envelope)**

**UPLOADED IN SEPARATE FILE**

We hereby accept the above (Sign & Seal of Bidder)

Sign & Seal of BHEL Contracting Authority